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John Ogonowski
Latin America
Farmer-to-Farmer Program

Executive Summary

This research project, prepared by marketing major students attending Florida International University during its 2006 Summer Term, aims to “determine the United States market potential of canned and frozen pineapple and cashew apple, evaluate its current level of market penetration (or lack thereof) and provide its findings to the farming cooperatives interested as part of the John Ogonowski Latin America Farmer-to-Farmer Program”

Canned Pineapple is a saturated market as of now. It is recommended that and further development with frozen pineapple be directed towards desserts and frozen drinks.

The cashew apple is one fruit that has been discarded and not exploited for as long as it has been new. Only consumed in local markets, this creates a great opportunity for exploiting a new product that is being wasted. This big opportunity also has big risk involved, since the cashew apple fruit has a complicated process to arrive to its derivate products, which in this case, the cashew apple juice and the cashew apple jam will be discussed.

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Introduction

Program Rationale

The John Ogonowski Farmer-to-Farmer Program, funded by the United States Agency for International Development, provides voluntary technical assistance to farmers, farm groups, and agribusinesses in developing and transitional countries to promote sustainable improvements in food processing, production, and marketing. The program relies on the expertise of volunteers from U.S. farms, land grant universities, cooperatives, private agribusinesses, and nonprofit farm organizations to respond to the local needs of host-country farmers and organizations.

To date, approximately one million farmer families (representing about five million people) have been direct beneficiaries of the FTF Program. Volunteers have provided direct hands-on training to over 80,000 people.

Winrock International and Florida International University's College of Business Administration have combined their resources and knowledge to implement the John Ogonowski Farmer-to-Farmer Program in Latin America, from 2003-2008.

The MAR 4613 course was created to add value to the Farmer-to-Farmer Program and prevent scarce volunteer resources from being diverted to requests for assistance, which are best, completed in the United States. The resulting freed up resources allow the program to fulfill requests with volunteers where an in country expert is a necessity. Of added value, hosts receive this additional US-based volunteer service at no cost to the FTF program.

Introduction

Research Objectives

The objective of this research is to analyze the US market potential of a variety of commodities. Our goal is to provide information on a variety of commodities, which can then be applied by our in-country partners to their business strategies. The primary beneficiaries of these reports are small and medium-sized farming cooperative groups which do not have the capability nor the resources to conduct these studies on their own.

It is of critical importance that while drawing conclusions to satisfy the research objective, a thorough analysis is carried out. In order to do so, some of the questions which must be analyzed are:

1. What is the demand of the product in question?
2. Who are the buyers and consumers of the product?
3. What are the quality standards and packaging requirements?
4. What is the distribution system for the product?
5. Who are the competitors?
6. What government regulations apply to the import of this product?

If it is a new product for the market, additional questions must be asked:

1. Who are the potential buyers of this product?
2. What are the potential distribution channels?
3. What are the additional important issues which must be investigated before attempting to export the product?
4. Are there any regulations which might inhibit this product from being sold in the US market?

Research Method

Given that the research objectives include getting background information of the potential market of the commodities included in the report, the research was conducted using an explorative design. Two main methods were employed: secondary data research and personal interviews. In some instances focus groups with consumers were conducted.

The secondary research was conducted by searching and interpreting existing information relevant from governmental and private electronic sources. When specific information about a commodity was not found secondary research was guided by similar commodities relevant to the information needed.

In order to complement the secondary research, personal interviews with experts were conducted. The interviewees were either academic or commercial experts in the production and commercialization of the commodities in question. In some cases, the researchers felt the need to complement this information direct input from the consumers; in those cases focus groups session were conducted.

The sources of the information are cited through out the content of the report. Contact information of the experts is provided. At the end of the report conclusions and recommendations for future action are suggested.

Canned & Frozen Pineapple

Canned & Frozen Pineapple

Product Description

CANNED PINEAPPLES

Pineapples come canned in many ways, they include:

- Water pack, solids and liquids (nutrition facts below)
- Unsweetened with added ascorbic acid
- Unsweetened without added ascorbic acid
- Extra heavy syrup pack, solids and liquids
- Heavy syrup pack, solids and liquids
- Juice pack, drained
- Juice pack, solids and liquids
- Light syrup pack, solids and liquids

Nutrition Information

1 cup (246g), water packed, solids and liquids

Calories:	79 kcal,330 kj
Total Fat:	0.22g
Sodium:	2mg
Total Carbohydrates:	20.4 g
Dietary Fiber:	2g
Protein:	1.06g
Sugars:	18.45g
Vitamin C:	18.9mg
Cholesterol:	0mg
Calcium:	37mg
Carotene, beta:	57mg
Magnesium:	44mg
Potassium:	312mg

¹ USDA

Canned & Frozen Pineapple

FROZEN PINEAPPLE

Nutrition Information

1 cup (245g), frozen, chunks, sweetened

Calories:	211 kcal, 882 kj
Total Fat:	.24 g
Sodium:	5 mg
Total Carbohydrates:	54.39 g
Dietary Fiber:	2.7 g
Protein:	0.98 g
Sugars:	51.7 mg
Vitamin C:	19.6 mg
Cholesterol:	0 mg
Calcium:	22 m g
Carotene, beta:	44 mg

² USDA

Statistical Data

U.S. Production Data

Recently, there has been a rapid growth in demand for tropical fruits in the United States. ³

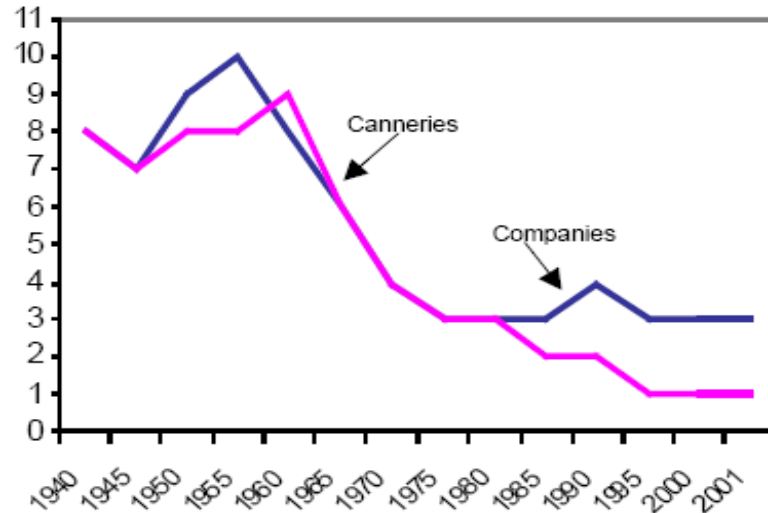
The United States has 2% of the world share and is the 14th largest producer of pineapples in the world. Most of the U.S. pineapples are harvested from Hawaiian plantations, but this is rapidly declining due to several reasons such as increasing imports. Imports of tropical fruits have grown to nearly 3 billion from 2.4 billion in 2003. ³

Dole Food Hawaii, Del Monte Fresh Produce, and Maui Pineapple Company are three large companies that dominate production in the United States. They produce the majority of their pineapples in Hawaii. Small growers are also contributors to pineapple production although they sell to fresh fruit market in the U.S. ³

Canneries dropped from nine to three in the 1970's as shown in the graph on the right. The Maui Pineapple Company is the only cannery facility in the U.S. devoted to processing pineapples. "Several pineapple companies closed down due to rising production costs, competition from Hawaii-based corporations with operations in low-cost foreign-producing countries, and a tight labor situation." ³

Canned & Frozen Pineapple

Number of pineapple companies and canneries in Hawaii



Source: The State of Hawaii Data Book 2001, Department of Business, Economic Development, and Tourism.

Apparent Consumption

Pineapples are the fifth most consumed fruit in the U.S. On average the United States consumes 12.4 pounds of pineapples annually over the last five. This accounts for 4% of fruit consumption.³

Imported pineapple consumption rose from 38% in 1970 to 82% in the 1990's. With the aid of imports, pineapples out ranks other popular domestic fruits such as peaches, pears, and strawberries.³

More canned and juice (processed pineapples) are consumed than fresh because more processed pineapples are available at retail markets.³

2002, U.S. consumption:

- 9.3 lbs. of processed pineapples per person
- 3.9 lbs. of fresh pineapples per person³

Statistics of Foreign Trade

Total import volume:

- 40% canned
- 40% juice
- 20% fresh

with fresh imports strengthening in recent years³

Canned & Frozen Pineapple

In the 1980's, Mexico was the largest supplier. Since the 1983 Caribbean Basin Initiative established duty-free status, imports from Central America have increased which decreased imports from Mexico.³

Production has grown the most in Costa Rica during the 1990's because of the increased harvested areas and the major improvements. Costa Rica's exports to the U.S. have increased supplying fresh pineapples. In 2002, they supplied 85% of total fresh pineapple import volume.³

Exports continue to decline. In the 1970s fresh pineapple exports made up only 7% of pineapple imports. Now more than half of U.S. pineapple shipments are fresh.³

Origin of Importations

"Imports constitute the bulk of domestic consumption"
Philippines, Thailand, and Indonesia are the major suppliers of both juice and canned pineapple to the U.S. market. They contribute 89% of canned and 92% of juice imports in 2002, with Philippines contributing 42%.³

Market Characteristics

Consumer Preferences

Still many of today's consumers are not familiar with handling pineapples in its fresh form. The increasing demand for fresh pineapples over the years may be attributed to consumer education, to better quality control, and to improved packing techniques and product movement. Customers find canned and frozen pineapples easier to handle than fresh pineapples, although customers prefer fresh pineapples.³

Quality Standards

Grades of frozen pineapple directly from USDA website:

U.S. Grade A or U.S. Fancy

The quality of whole slices, crushed, tidbits, or chunks that possess a practically uniform, bright, characteristic yellow color in the applicable style; are practically uniform in size and symmetry in the applicable style; are practically free from defects in the applicable style; possess a good character in the applicable style; possess a normal flavor and odor; and score not less than 90 points when scored in accordance with the scoring system outlined in this subpart.

U.S. Grade B or U.S. Choice

The quality of whole slices, crushed, tidbits, or chunks that possess a reasonably uniform, good, characteristic

Canned & Frozen Pineapple

yellow color in the applicable style; are reasonably uniform in size and symmetry in the applicable style; are reasonably free from defects in the applicable style; possess a reasonably uniform, reasonably good character in the applicable style; possess a normal flavor and odor; and score not less than 80 points when scored in accordance with scoring system outlined in this subpart.

U.S. Grade C or U.S. Standard

The quality of half slices and broken slices that are fairly uniform in size and symmetry; possess a fairly uniform, fairly good, characteristic yellow color or better color; are fairly free from defects; possess a fairly good character; possess a normal flavor and odor; and score not less than 70 points when scored in accordance with the scoring system outlined in this subpart.

U.S. Grade D or Substandard

(1) the quality of whole slices, crushed, tidbits, or chunks that fail to meet the requirements of U.S. Grade B or U.S. Choice; or (2) the quality of half slices or broken slices that fail to meet the requirements of U.S. Grade C or U.S. Standard.

³ USDA

Market Segments

Pineapples are consumed all over the United States during all times of the year. This has been increasing with the availability and better knowledge of pineapples.

Uses for pineapples have increased. In the past decade for example, there has been a boom of smoothie shops. Today health seems to play a big factor in what people eat. Frozen pineapple could have a strong foot hold in this market if it continues to grow.

Canada is the United States' largest export market. They import more than half of their total pineapple volume. Other leading export markets are Japan, South Korea, and Mexico. Shipments to Japan are fresh pineapples and pineapple juice, although South Korea only imports pineapple juice.³

Acceptable Conditions

Canned pineapple mainly needs to be grade B. This is described as the following:

“U.S. Grade B or U.S. Choice is the quality of whole slices, crushed, tidbits, or chunks that possess a reasonably uniform, good, characteristic yellow color in the applicable style; are reasonably uniform in size and symmetry in the applicable style; are reasonably free

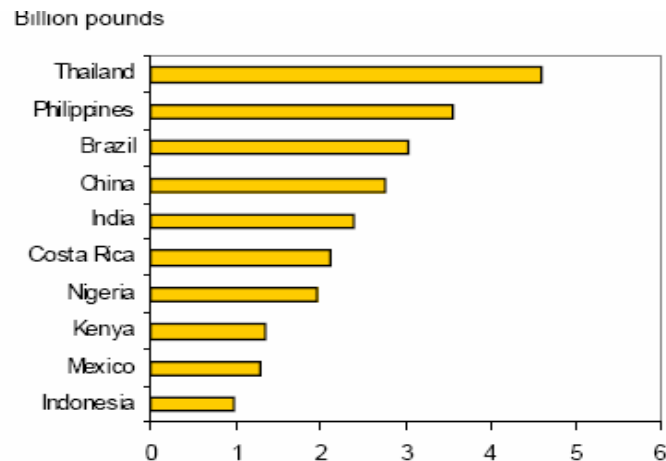
Canned & Frozen Pineapple

from defects in the applicable style; possess a reasonably uniform, reasonably good character in the applicable style; possess a normal flavor and odor”³

Competition

Thailand (nearly 5 billion pounds), Philippines (more than 3.5 billion pounds), and Brazil (nearly 3 billion pounds) are the largest pineapple producers in the world.³

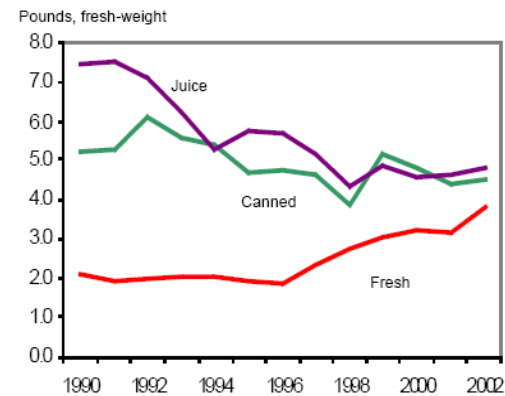
Average Pineapple Production in the Top 10 countries 2000-2002³ USDA



Demand Trends

Since the 1990's, there has been a decreasing trend in per capita consumption of processed pineapples while fresh use continues to grow.³

U.S. Pineapple per capita Consumption



Source: Economic Research Service, USDA.

³ USDA

Canned & Frozen Pineapple

Market Access

Tariff Measurements

Fresh or dried, not reduced in size, in bulk	\$.0051 x kg
Fresh or dried, not reduced in size in crates or other packages	\$.0211 x kg
Fresh or dried, reduced in size	\$.0044 x kg
Frozen in water or containing added sweetening	\$.0025 x kg
Provisionally preserved	\$.0025 x kg
Preserved by sugar (drained, glace, or crystallized)	21% x value
Otherwise prepared or preserved	\$.0035 x kg
Juice not concentrate, or not having a degree of concentrate of more than 3.5 degrees	\$.042 x liters
Juice concentrate (in concentrations greater than 3.5 degrees)	

⁴ Food Market Exchange

Canned & Frozen Pineapple

Regulations

CANNED PINEAPPLE

Regulations of canned pineapples vary based upon how the pineapple is cut.

- **Grade:** Grade A Pineapple is used for crushed style, Grade B Pineapples are required for sliced, tidbits, cubes, and chunk styles.
- **Style:** Crushed Pineapple must be course cut while all others can be cut in any required specification.
- **Packing Medium:** Packing medium is restricted to light syrup, pineapple juice or any combination of the two.
- **Fill of Container:** All cans must be filled as full as possible without impairing quality.
- **Drained Weight:** Containers must meet the following conditions and <50% must meet the recommended drained weight. Also there must be not shortage in the individual containers.
 - **No. 2 cans:** The sliced, tidbits and chunks must have a minimum drained weight of 11.7 ounces. The crushed style must be regular-pack and must have a minimum drained weight of 12.6 ounces.
 - **No. 10 cans:** The sliced pineapple must have a minimum drained weight of 61.5.
 - **Ounces.** The chunks and tidbits must have a minimum drained weight of 65.75 ounces for light syrup and 63.6 ounces for juice pack. The crushed style must be heavy-pack and must have a minimum drained weight of 78.0 ounces. ⁵

Technical Procedures

Freezing ⁵

- Cleaning the fruit is the 1st step in freezing the fruit. Rinse the Pineapple in cold water. Not only does this clean the fruit, but allow the juices to stay locked in during the peeling and coring processes.
- Next the Pineapple has to be peeled and cored. From here the pineapple can be cut in to chunks.
- Next is the packing of the fruit. Normally other fruits are packed in pineapple syrup (a distilled version of pineapple Juice) to keep the frozen products from discoloring. The same goes for pineapple. The bags must be placed in air tight and moisture proofs bags to reduce ice crystals from forming. Ice crystals can diminish the quality of fruit once thawed.

Labeling.

Labeling can take place before or after the pineapple is packed.

Canning ⁶

- Clean the Pineapple in the same as you would freezing the Pineapple.
- Peeling and coring the pineapple is next. Cutting the pineapple in to slices, chunks, tidbits...etc.
- Place in filtered Pineapple juice, light or medium syrup.

Canned & Frozen Pineapple

- Heat the packing medium and chunks to a simmer for approximately 10 minutes. This breaks down the enzyme bromelain.
- Seal can and let cool.

Recommended process time for Pineapple in a boiling-water canner.

		Process Time at Altitudes of			
Style of Pack	Jar Size	0 - 1,000 ft	1,001 - 3,000 ft	3,001 - 6,000 ft	Above 6,000 ft
Hot	Pints	15 min	20	20	25
	Quarts	20	25	30	35

Canned & Frozen Pineapple

Prices

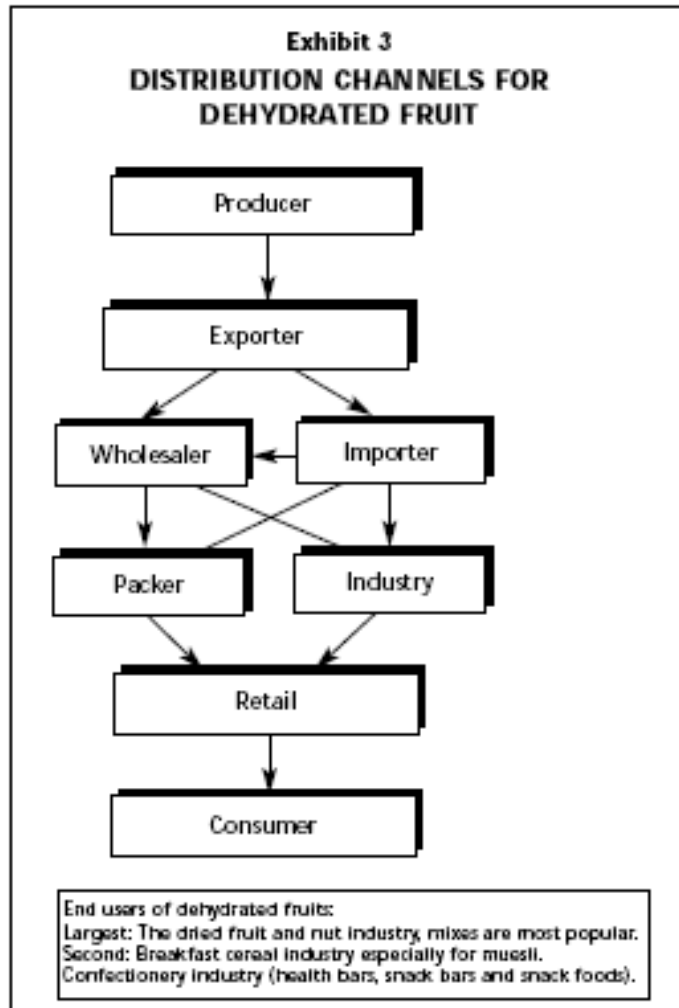
According to the USDA the prices from Guatemala, Costa Rica, and Ecuador range from \$9 - \$12 per single layer carton. Retail Prices on canned pineapple vary from \$1-\$1.30. While Frozen Pineapple on varies from \$1.15 - \$1.25.⁷

Distribution Channels

Many distribution methods are used to import frozen and canned pineapples. The easiest method is to have an exporter take care of the exporting, since they are more familiar with the regulations. Qualities of a successful exporting company include developing the distribution channels, reducing shipping times, and meeting standards and quality.

The most profitable is for the company to export the pineapples directly. It is more profitable, although it has the most risks.

Canned & Frozen Pineapple



⁹ Emdap Case Book

Commercial Practices

Procedures to Make Orders

Placing an order with a new supplier

The first thing the buyer needs to do is contact the supplier. This can be done via email or phone. Once this is done they need discuss what kind of pineapple to use, quantity of pineapple needed, cut of pineapple, packaging, and price. If the supplier can supply what is needed an order is placed. After placing the order, a confirmation is sent either via fax or e-mail. Once the order is confirmed the order is placed in processing.¹⁰

Placing an Order using an Automated Network

Another way of ordering is establishing an automated network with either the distributor or the manufacturer directly. This is done by sharing inventory information with the distributor/manufacturer. As soon as inventories run low, the computer will automatically reorder from the distributor/manufacturer.¹¹

Systems and Terms of Payment

There are a number of ways to send payments based upon the technology of the business and the amount of business being done with the supplier.

If the order is international and there is no current relationship between the businesses, the supplier may wait for a check to clear before shipping and order. A wire will expedite the process.

Canned & Frozen Pineapple

If the order is international and there is a current relationship between the businesses, the supplier will normally send the shipment upon receipt of the check.

If the order is international and there is a busy relationship between the businesses, the business may set up an automated network sharing accounting information. This way the money is transferred as the order is placed.

Cash is not the best term since there is no paper trail to verify payment if receipts are lost.

Transportation

- Shipping is most cost effective via freight boat. The close proximity to ports such as Miami make it the easy to exploit the shipping lanes of the Caribbean.
- It is recommended that the pineapple be taken a port via truck then shipped to the US via refrigerated containers on freight boats.
- Maximum weight per container being 30.48 KG¹¹. Shipping the weight needed via airplane is much to expensive for the margin expected on the Canned and Frozen Pineapple. Also if Pineapple is shipped in their preserved state, the fruit can withstand a longer trip.

Packing, Types Used: Crates and Labels

Labeling requirements

Labeling requirements are set by COGUANOR's labeling standard #34039. 40 requirements are set by this standard however an agreement was struck and only the following are required:

1. Product definition/description
2. Name of the product (This should be the official name as noted on the U.S. Certificate of free sale)
3. Physical characteristics, including ingredients (This has to be a qualitative composition, which was indicated in the back of the registration form). If this information is in English, please translate literally.
4. Net weight/volume
5. List of ingredients and additives and the percentage of total for each
6. Name, address and telephone number of Guatemalan distributor
7. Food Control registration number (D.G.S.S.-D.R.C.A. _____-Sanitary license obtained at a Center of Sanitation); the original license has to be presented. Approximate cost for each product: Q.630.00.
8. Expiration date
9. If applicable "Keep Frozen"
10. If applicable "Form of Preparation"

Canned & Frozen Pineapple

Packaging Requirements

- **Cans:** Each individual can must be labeled appropriately. Size of can may vary, however correct weight and serving amount must be listed on each can.
- **Frozen:** *Exact Packaging has not yet been determined.* It is suggested that all frozen products be kept at or below -10°F to ensure freshness.

Sales Promotion

There are various methods to execute sales promotion. Dole for example has promotional offers which are meant to sell a certain amount of product within a specified time period.¹²

They also sell items such as pineapple candy, pineapple knives, chocolate covered pineapple, macadamia nuts, Waialua Brand coffee and Plantation Brand Chocolates with the DOLE logo on it. Visitors can purchase items in Salinas, California and at two locations in Hawaii.¹²

Recipes are given in order to give the consumer additional ways of using the products.

Market Perspectives

The United States imports pineapple from many countries, not including what is grown domestically. Among the countries importing are Thailand, The Philippines, Brazil, and Mexico. The American Dollar is currently weaker than normal, making it more expensive to consume imported goods.

Recently there has been a rapid growth in demand for tropical fruit. Imports of tropical fruit have grown to nearly a total import of nearly 3 billion from 2.4 billion in 2003.

Most people are not aware of all the tropical fruits available to them. Further education could increase demand for canned or frozen pineapple.

Customers prefer fresh products. Canned and frozen pineapples are already in a preserved state so this issue should not be a problem.

As mentioned before canned pineapple mainly needs to be grade B. This is described as the following

“U.S. Grade B or U.S. Choice is the quality of whole slices, crushed, tidbits, or chunks that possess a reasonably uniform, good, characteristic yellow color in the applicable style; are reasonably uniform in size and symmetry in the applicable style; are reasonably free from defects in the applicable style; possess a reasonably uniform, reasonably good character in the applicable style; possess a normal flavor and odor;”

⁹ <http://emdapcasebook.iie.org/pdfs/CS-04.pdf>

Cashew Apple

Cashew Apple

Product Description

Cashew Apple juice is made from the cashew apple, which is a pear-like fruit that grows on top of the cashew nut¹³. In cashew-producing countries, the nut is only one of the products enjoyed by the local populations. The cashew "apple" or false fruit is an edible food rich in vitamin C. It can be dried, canned as a preserve, or eaten fresh from the tree. It can also be squeezed for fresh juice, which can then be fermented into cashew wine which is a very popular drink in West Africa. In parts of India, it is used to distill cashew liquor referred to as *feni*¹⁴. In some parts of South America, local inhabitants regard the apple, rather than the nut kernel, as a delicacy. In Brazil, the apple is used to manufacture jams, and soft and alcoholic drinks.

Many things can be done with the cashew apple, many cooking recipes, alcoholic beverages, jams, and juice. We will focus on the juice and jam.

Cashew apple juice has many medicinal purposes¹⁵, including:

- Treat gastric diseases
- Stops vomiting
- Relieves sore throat
- Increase the excretion of urine
- Induce perspiration
- Increases resistance to venereal diseases
- Treats abdominal dropsy
- Strengthens memory

The cashew apple contains around five times the vitamin C that oranges do. When processing, the juice losses some of the vitamin C it contains, but is still a large amount over orange or most other fruit juices containing vitamin C.

Statistical Data

U.S. Production Data

According to interview to Mr. Eckless¹⁶, Cashew apple is fairly produced in the United States (it is only produced in Florida, but it is not exploited).

The Juice and jams are mostly produced in South America, Central America, the Caribbean, and Thailand, for both local markets and international markets.

¹⁶ Interview to Mr. Jim Eckless

Apparent Consumption

Juice is consumed as a drink; it can also be mixed with vodka and make a great alcoholic beverage¹⁵.

The jam can be consumed as jelly; for breakfast items mainly. They can both be used for different recipes.

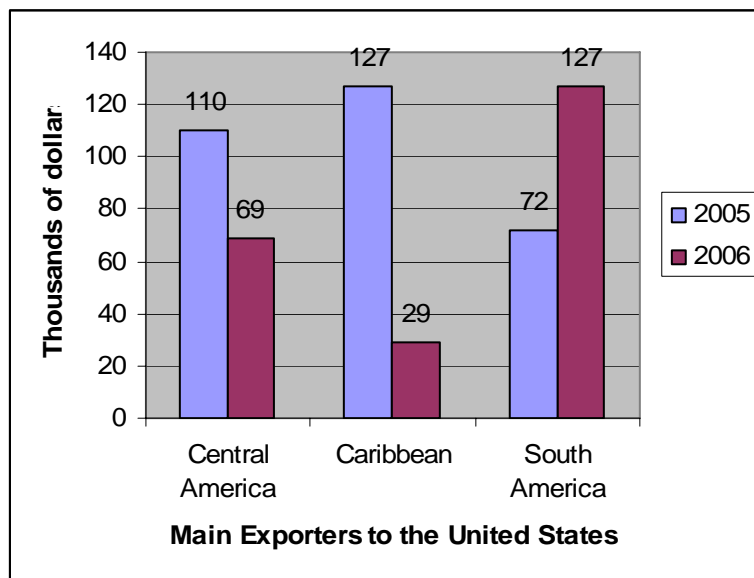
¹⁵ Cashewyjuice.com

Statistics of Foreign Trade

The cashew apple juice and jam are not imported or exported into the United States, according to Mr. Eckless. However, the cashew apple fruit is imported into the United States (not greatly, but it is done). We will be using those statistics instead.

Cashew Apple

The graph shows how the main importer's percentage of the market shares has changed from the first quarter of 2005, to the first quarter of 2006¹.



¹ USDA

The table below it shows how the imports of the cashew apple fruit has decline over the last years.

Cashew apple imports into the United States
January-April 2005 vs. January-April 2006

General Imports	January to December Values in thousands of dollars			
	2001	2002	2003	2004
Cashew Apple	747	615	634	764

Data collected from the United States Department of Agriculture

Origin of Importations

The main imports of the cashew apple come from South America (specially Brazil), Central America, and the Caribbean¹.

They are also produced and imported from Thailand.

¹ USDA

Cashew Apple

Market Characteristics

Consumer Preferences

The cashew apple juice can be consumed regular juice, directly taken, or is also recommended, by locals, to mix with vodka, creating a good alcoholic drink¹⁵.

The cashew apple jam is mostly consumed as a breakfast item or a snack, just like other jellies are used.

¹⁵Cashewyjuice.com

Quality Standards

As interviewee, Mr. John Eckless said, there are currently not quality standards in the United States neither for the cashew apple juice nor for the jam. This occurs because there is virtually no production of these products in the states, as well as virtually no imports or exports.

Market Segments

Since there is not a market for cashew apple products in the United States, there are no particular markets segments for these products. A market segment that can be targeted to would be people who care about their health. The greatest advantage that the cashew apple products have over its competitors is their high content of vitamin C, which can be attractive for people who stay in shape and consume healthy products.

Cashew Apple

Acceptable Conditions

The main acceptance conditions for these products come from the quality of the production of them. Since there are not quality standards for these products, if the procedure is done correctly, then it would be consider acceptable, specially since the procedures to create these products are so delicate¹⁶.

¹⁶ Interview with Mr. Jim Eckless.

Competition

Other popular citrus jams and juices compete with these products that have already been established. It would naturally be more difficult to sell these products compared to the other established jams and juices. For example, Cashewy Juice, a Thai product, is only served grossly within Thailand. This company ships very few exports of orders outside the country. These orders are only accessible on their website

Demand Trends

Demand for cashew apple products is very low right now, but might increase thanks to their high amount of vitamin C¹⁶. This may occur due the fact that demand for similar products has increased over the years.

¹⁶ Interview with Mr. Jim Eckless.

Market Access

Tariff Measurements

There are no special tariffs for cashew apple juice or jam. This occurs because these products are not currently imported in great scale, according to Mr. Eckless.

Restrictions and Regulations

There is no information available on special restrictions on these products.

Technical Procedures

The cashew apple juice is made from the cashew apple¹⁷. Different steps are taken to process the juice out of the fruit. It includes extracting, pasteurizing and bottling processes, mostly done by human hand. The apples are preheated for 10 minutes, if done over that, the fruit spoils and become unacceptable for the market, changing its color, taste and most of its vitamin C.

In cashew apple jam, the apples are immersed in a two percent brine solution (common salt solution) for three days. After washing free of salt, the apples are steamed for five to seven minutes at 10lb pressure. The steamed apples are then cooled and washed in water. Any bad portions are trimmed off before the apples are sliced into segments. The apple slices are cooked with the addition of salt, sugar, spices and the acetic acid. The ginger, cinnamon and coriander are tied loosely in a cloth bag and added to the mixture. This bag is removed when the chutney is cooked.¹⁷ Bioline.com

Cashew Apple

Prices

Cashew Apple Juice¹⁵:

A bottle of Cashewy Juice of 350 ml costs around 8.80 US\$.
A bottle of Cashewy Juice of 500 ml costs around 10.00 US\$.

¹⁵ Casheyjuice.com

Distribution Channels

Jelly is extremely difficult to make. You would need to sell it to a big name brand such as Smuckers¹⁶. The only problem is they probably wouldn't consider it since it's a new product, and they have already established better selling jams. Therefore, the cashew apple industry must create their own market, very likely for smaller distributions.

The same would be the case for the cashew apple juice. It would have to be introduced as a healthy product by an already established brand, or it would have to compete against these brands, which was the case of Dole; who had to sell their company to Tropicana because they weren't able to compete against it.

For specific distribution channels, two cases occur:

1. If the product is going to be picked up by a recognized brand:
 - They can use their already existing distribution channels that they have established in the countries that they already operate with. For Example:

Cashew Apple

Hypothetically, if Smuckers operates in Brazil, they can use their already existing methods for distribution if they bring the cashew apple from Brazil.

- They can also piggy-back with another company that operates in those countries. For Example: If they decide to import the cashew apple from India, they can pay Dole to use their distribution system.

2. If the product is going to be introduced by a new company:

- They would have to either create new distribution channels or piggy back with an existing company.

In this case the product will be more likely to be sold as a “luxury item”, which is hard to find in the market, and probably with a low demand at the beginning, which allows them to set up small and more specific distribution channels.¹⁶ Interview with Mr., Jim Eckless.

Commercial Practices

Procedures to Make Orders

Orders can be placed on-line on the website www.cahsewyjuice.com¹⁵. They can also be placed over the phone (phone number is also located on the website).

If they are adopted by a popular brand company or introduced into the market by a small private company, it would be available on both wholesalers (like Costco) and/or retailers (like Publix); as well as health stores.¹⁵ Cashewyjuice.com

Systems and Terms of Payment

1. Imports:
 - a. Open Accounts where they can cancel portions of orders or pay directly. Money can be transferred from bank accounts through online payment systems, or directly charged on over-the-phone credit card charge.
 - b. Credits on accounts are not recommended since the market will be unstable and new, making it a big risk to allow payment to come later.
2. Consumers:
 - a. Online payment for online orders.
 - b. Payments on the store of in-store purchases.

Cashew Apple

Transportation

Different methods can be used: sea, air, ground; depending from where the product is going to be imported. Since the actual fruit rots one day after being picked up, the products would have to be processed in the origin country; if not, it would have to be sent the fastest air way in order to be processed here (which would be too expensive). Temperature for the shipments should be regular room temperature.

Packing, Types Used: Crates and Labels

The cashew apple is shipped to the United States in Metric Tons.

Since these products are not produced here, no information was available as regarding crates and labels. However, the cashew apple juice is commercially produced in Thailand, so we will use the labeling requirements that are imposed by the Federal Department of Agriculture in Thailand¹⁹.

The labels must be truth and not deceiving. Labeling is regulated by the Minister of Public Health; according to the Food Act of B.E.2522 (1979).

Labels must show name of the products, main ingredients, name and address of the manufacturer. Special situations will require special labeling.¹⁷ Thailand FDA

Sales Promotion

Cashew Apple Juice

Food industry is naturally low¹⁶. The product has to be positioned in a particular way. For example, as a new juice drink that you can mix with alcohol. How to mainstream juice mixes. Latin American Food & Beverage shows are good promotion. - From interview

It can also be positioned as a healthy drink thanks to its high vitamin c quality.

The prices should be a little higher than the average price on the juice market, since higher price usually conveys better quality (it is not necessarily true, but is the message it sends).

Cashew Apple Jam

It would also need to be positioned in the market as a specialty. It can be introduced by a large company as part of a new line of “healthy jams”, which would be popular in the healthy consumers market.

¹⁶ Interview with Mr. Jim Eckless

Market Perspectives

The exploitation of cashew apple juice is a big opportunity for current cashew seeds exploiters.

The processing of the juice is not too complicated or expensive. The resources would be the same cashew apples that they are already discarding, so they can give it a use and profit from it. This will also generate jobs in the industry¹⁷.

There is also a great chance for marketability since the consumptions of citrus products or other products with high contents of Vitamin C have increased over the years.

The jam would be harder to market because the production of it is hard and costly.

The main competitors with cashew apple juice are mainly other juices rich in vitamin C, like orange juice. Especially because it is an already well establish product in the market, and the introduction of a new product can be hard.

The cashew apple juice can be consumed regular juice, directly taken, or is also recommended, by locals, to mix with vodka, creating a good alcoholic drink.

Neither product is widely consumed. If introduced, they would have to find a niche in the market, which would be though to do over a product already dominating that niche¹⁷.

¹⁸ Interview with Mr. Jim Eckless

¹⁹ IDRC

Importers List and Distribution Networks

According to Mr. Eckless, there are not any existing distribution networks for cashew apple products; since these products are not imported into the United States. If imported, the best distribution networks would be the ones explained in the “Distribution Channels” section.

Below is list of companies that sell pineapples:

Mid-America Food Sales, Ltd.

Box 904
Northbrook, IL 60065-0904
United States of America
Tel: (847)945-0104
Fax: (847)945-0424

Dole Plantation

64-1550 Kamehameha Hwy.
Wahiawa, Hawaii 96786
(808) 621-8408
(808) 621-1926 fax
website: www.dole-plantation.com

Del Monte Fresh Produce Company

P.O. Box 149222
Coral Gables,
FL 33114-9222 USA
Tel: 305-520-8400
or 800-950-3683
Fax: 305-567-0320

Upcoming Commercial Events

Upcoming Commercial Events

The next events are posted on “The Green Sheet”¹⁹

- Beverage Digest’s “Wall Street Smarts” – June 12
- Institute of Food Technologists Annual Meeting and Food Expo – June 24-28
- National Association of Chain Drug Stores-Market Place Convention – June 24-27
- National Association of Convenience Stores Meetings- Oct 8-11
- International Food Distributors Foodservices Distribution Conf. & Expo – Oct 15-17
- International Assoc. of Food Industry Suppliers- Food & Beverage Expo – Oct 29- Nov 2

²⁰ Beverage Digest “The Green Sheet”.

Conclusions and Recommendations

The cashew apple products (juice and jams) are relatively new products, at least for the United States market. This creates a very big opportunity for companies that would plan to introduce this new product into the market. On the other side, the risks involved in such a strategy are greater than the actual opportunity. There are many barriers a manufacturer would have to defeat in order to profit from such an investment; like high cost production, high risk by production error, acceptance of the new product by the market, competition of already established and bigger brands of similar products, etc. We believe that the risks involved in such investments are much higher than the rewards that it may offer.

Canned Pineapple is a saturated market as of now. The big 3, DOLE, DEL MONTE, & GOYA, amongst smaller brands all dominate it out in this market segment. However, the frozen pineapple market is still small and can grow. The largest risk for frozen pineapple is the rapid decrease in quality as pineapple thaws. This is why it is recommended that further development with frozen pineapple be directed towards desserts and frozen drinks.

References

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- ³ <http://www.ers.usda.gov/Briefing/FruitAndTreeNuts/fruitnutpdf/pineapple.pdf>
- ⁴ http://www.foodmarketexchange.com/datacenter/laws/dc_lr_tariff_02.htm
- ⁵ <http://www.ams.usda.gov/fv/cp/fruit/announcement/fv200cs.pdf>
- ⁶ http://www.cahe.nmsu.edu/pubs/_e/e-321.pdf
- ⁷ <http://edis.ifas.ufl.edu/HE244>
- ⁸ http://marketnews.usda.gov/portal/fv?&paf_gear_id=1200002&rowDisplayMax=25&repType=termPriceDaily&run=Run&blech=&paf_dm=full&endDate=05/29/2006&repTypeChanger=termPriceDaily&locName=&step2=true&type=termPrice&type=termPrice&repDate=05/29/2006&locAbr=MH&locChoose=commodity&startIndex=1&step3date=true&step3date=true&commAbr=PINE&dr=1
- ⁹ http://dole.com/CompanyInfo/Contact/HelpDesk_Explmp.jsp
- ¹⁰ <http://www.delmonte.com/Company/Contact.asp>
- ¹¹ <http://emdapcasebook.iie.org/pdfs/CS-04.pdf>

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- ¹⁵ Living and Raw food.
<http://www.rawfoods.com/articles/rawcashew.html>
- ¹⁶ Wikipedia Encyclopedia. <http://en.wikipedia.org/cashew>
- ¹⁷ www.cashewjuice.com
- ¹⁸ Interview with Mr. Jim Eckless, Context Network Consulting, CEO and Consultant. jeckless@myacc.net
- ¹⁹ IDRC Resources.
<http://archive.idrc.ca/books/resources/v231/cashew.html>
- ²⁰ Beverages Digest The Green Sheet. <http://www.beverage-digest.com/pdf/Events.pdf>
- ²¹ Thailand FDA. <http://www.fda.moph.go.th/eng/food/pre.stm>